



National Weather Service Aberdeen, South Dakota



October 2009

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Winter Weather Preparedness Weeks

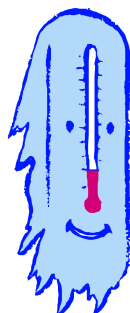
South Dakota Winter Weather Preparedness Week
October 26th-30th

Minnesota Winter Weather Preparedness Week
November 9th-13th

The reds, yellows and browns appearing in the trees are a sure sign that the area is once again in a change of seasons. To assist in refocusing on the hazards that winter weather can bring, Winter Weather Preparedness weeks are fast approaching. In South Dakota, October 26-30 are dedicated to preparedness activities. In Minnesota, Winter Weather Preparedness Week will be November 9-13.

These weeks are the time to get you, your family, your house and vehicle ready for the strains of winter weather. What needs to be done to the family house and vehicle to get them winterized? Do you remember what the various winter weather advisories, watches and warnings mean? As the weeks approach, you will be able to find more information on our website,

<http://weather.gov/aberndeen>. You can also find preparedness information at <http://www.ready.gov/america/beinformed/winter.html>



Get Prepared for Winter

Judging from the yellows, reds and browns that are showing up in the trees, autumn is right around the corner. The heat and humidity of summer is past. But, severe weather isn't over, it just changes form. Now is the time to "switch gears" and get prepared for severe winter weather. The 30 below wind chills, snow drifts and short days are just around the corner. Taking the time now to prepare for the winter months will be easier and less stressful than trying to deal with any potential problems during the middle of winter.

In the Home:

- Check the windows and doors for drafts. Also check the insulation of the house in the attic. Were there any leaks during the summer rains? Insulation that gets wet doesn't insulate that well.
- Make sure that the heating system in the home is running at optimal performance. Are the furnace filters clean? If a wood burning stove or fireplace is in the home, has the chimney been cleaned?
- Is the carbon monoxide detector properly placed and operating correctly?
- Are rain gutters cleaned out to prevent the formation of ice building up?
- In the outside chance that you become stranded in your home during a winter storm, are there enough provisions on hand to make it through? Non-perishable food items, dry wood for burning if you have a fireplace or wood stove, and drinking water are a must to have on hand.
- Don't forget that on Sunday, November 1st, we "fall back" time wise. That is also a great time to replace the batteries in any smoke detectors, carbon monoxide detectors and NOAA weather radios.

In the Vehicle:

- Is the battery up to snuff? A battery can lose up to ½ of its starting power during the dead of winter.
- Does the anti-freeze test down to at least 30 below zero? This would also be a good time to check the entire heating system of the car. Do any belts look worn or have cracks in them? Are hoses soft and squishy? Now is the time to repair or replace them.
- Do the tires have ample tread left? If the tires are getting rather thin in the tread department, it might be time to have the tires replaced.
- Is the winter survival kit in the vehicle? Elsewhere in this issue is a sample list of what a winter survival kit should contain.
- Don't let the vehicle fall below a half tank of fuel. This

to keep condensation from forming in the tank, and helps to keep the fuel line from freezing up. If you have a diesel powered vehicle, is the fuel blended properly to keep from gelling up?

This is just a small sampling. The following website offers additional items, ideas and suggestions to make it safely through the winter season:

<http://www.redcross.org/www-files/Documents/pdf/Preparedness/WinterStorms.pdf>

Now is the time to take a little time to check out these details. Doing so now will save you a lot of frustration during winter.



What follows is a sample winter survival kit to be placed in your vehicle. Don't feel like the items on this list are the only things that should go into your survival kit. This is only a sample. Perhaps your personal experience or situation dictates that other items need to be added. What is important is that you have a kit in your vehicle.

Survival Kit sampler:

- blankets/sleeping bags
- high-calorie, non-perishable food...such as nuts, granola bars and trail mixes
- flashlight with extra batteries
- first aid kit
- knife
- extra clothing to keep dry
- a large empty can and plastic cover with tissues and paper towels for sanitary purposes
- a smaller can and water-proof matches to melt snow for drinking water;
- an empty coffee can and candles
- a sack of sand (or cat litter)
- shovel
- windshield scraper and brush
- tool kit
- tow rope
- booster cables
- water container
- compass
- road maps

Also remember that if you become stranded in your vehicle during a winter storm, **NEVER** leave the safety of the vehicle. Your odds of survival greatly increase if you remain with the vehicle. Also travel with a fully charged cell phone, with a backup battery if possible.

Snowfall Reminders

With winter just around the corner, it's time once again to review the procedures for measuring and reporting winter precipitation.

Helpful reminders:

At the beginning of the snowfall/freezing season, remove the funnel and inner measuring tube of the rain gauge to expose the overflow can so that it can more accurately catch frozen precipitation.

Check your gauge to make sure there are no leaks. If there are leaks, give us a call and we'll mail you out a new one.

If you have a snow board, put it out and mark its location with a flag or some other indicator so it can be found after a new snowfall. Be sure to locate it in an open area (not under trees, obstructions, or on the north side of structures in the shadows).

What to report:

Measure and record the snowfall (snow, sleet, snow pellets) since the previous snowfall observation. Take this measurement once-a-day and be sure to reflect the total accumulation of new snow observed (in inches and tenths, for example, 3.9 inches) since the last snowfall observation.

Determine the depth of snow on the ground at the normal observation time. Take this observation once-a-day at the scheduled time of observation. Use a measuring stick to measure the total depth of snow on the ground. Report snow depth to the nearest whole inch, rounding up when one-half inch increments are reached (example 0.4 inches gets reported as a trace (T), 3.5 inches gets reported as 4 inches).

Measure and record the water equivalent of snowfall since the previous days observation.

Measuring liquid precipitation equivalent:

Report the liquid water equivalent for any NEW snowfall to the nearest 0.01 inch.

Two methods for melting snow

Add warm water to the gauge in order to melt the snow. Remember to carefully measure the added warm water so you can subtract that figure from your final measurement.

Another method is to place the rain gauge in a bucket of warm water. Remember to dry the outside of the gauge off so none of the water from the bucket runs down the sides and into your measuring tube.

If too little snow has fallen to effectively measure, report it as a trace.

Reporting New Snowfall Depth:

Take an average of ten measurements in an open area. Try to avoid any drifts or bare spots.

Report to the nearest 0.1 of an inch.

Reporting Total Snow Depth:

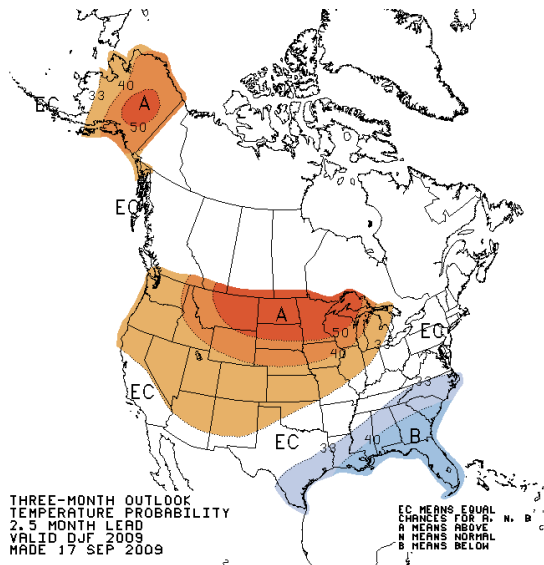
Report snow depth whenever snow covers more than 50% of the ground.

Report to the nearest whole inch. If less than 1/2 inch, report as a trace.

Note: Measuring total snow depth can be tricky. As you know, snow may melt quickly from south facing areas, but linger for days in shaded or north facing area. Use good judgement in averaging the snow depth around your area.

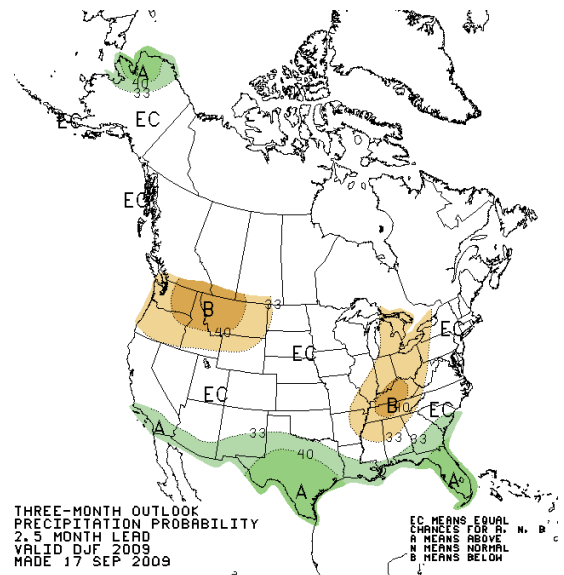
We at the National Weather Service would like to take this opportunity to say **THANKS!** With the assistance of our COOP, precipitation spotters, and CoCoRaHs reporters, we hope to have a successful winter season keeping the public informed and ready.

Winter Outlook



Temperature outlook for December through February...calls for much above normal temperatures across the Northern Plains

Precipitation outlook for December through February...calls for near normal precipitation across the Northern Plains.



Based on a forecast of a moderate El Niño and negative Pacific Decadal Oscillation (PDO), it appears as though the Climate Prediction Center forecast for an above normal cold season is realistic.

However, it is worth considering the “potential for” a somewhat colder forecast, based on past analogs of similar situations.

In addition, it appears unlikely that temperature departures will be as large as the observed warm anomalies during the El Niño winters of the 1980s and 1990s.

Like all South Dakota winters, we will get snow. However, there is a pretty strong signal for below normal snowfall when examining trends in December, January and February. Keep in mind that March and April have been rather snowy lately and snowfall events often do persist well into spring.

Expect the usual day to day variability as is typical of the Northern Plains winters – including at least a few bouts with arctic air.

New: Cold Advisory for Newborn Livestock (CANL)

Nationally, approximately 95,000 calves die each year due to cold stress, with an estimated loss of \$38 million. The majority of loss occurs during the critical weeks of calving (mid-January through mid-April). This critical period tends to coincide with the most extreme weather that South Dakota and the upper Midwest have to offer. Last winter season, the National Weather Service (NWS) in Glasgow, MT in collaboration with the University of Miami and the University of Delaware developed a pilot program for northeastern Montana to determine the most effective means of providing ranchers with advanced warning of extreme weather to help minimize calf losses. The program, named: **C**old **A**dvisory for **N**ewborn **L**ivestock (CANL), will run a second year over an expanded area from late January through the end of May, hoping to collect additional feedback from local producers in South Dakota along with the rest of the upper Midwest.

What conditions are most detrimental to newborn livestock? The criteria for CANL were derived from interviews with ranches and from published scientific research on animal health. Newborn Livestock, particularly less than 24 hours old, are least able to regulate body temperature and are therefore most susceptible to the cold. The specific weather elements that will determine the CANL index consists of a combination between:

Wind Chill Value

The potential for Rain or Snow

High Humidity

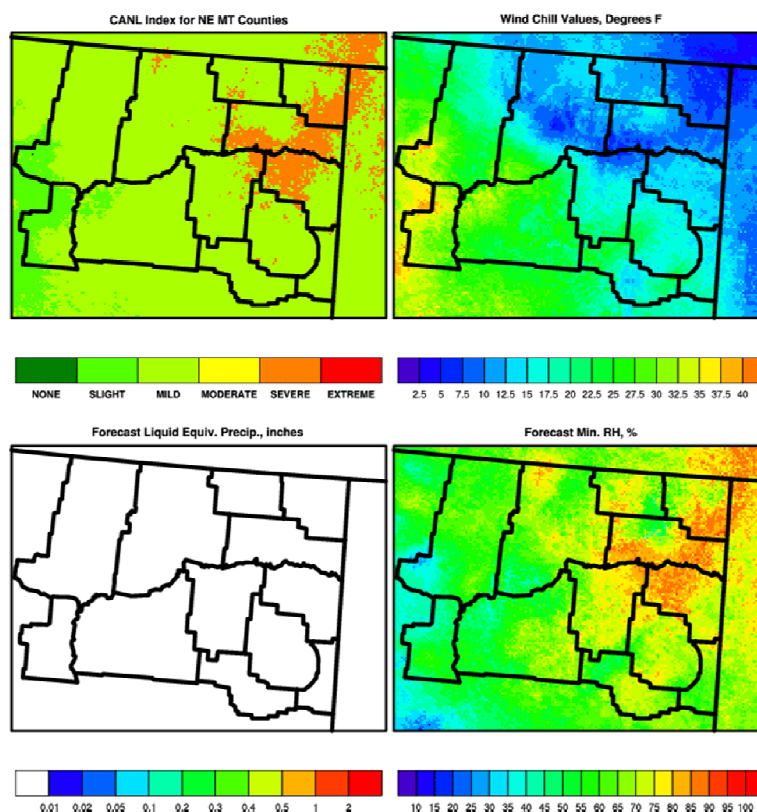
What will this product look like/how can I access it? Debate is ongoing on how best to provide this information. NWS Glasgow produces graphics and a Public Information Statement updated twice a day (4 am and 3 pm) with the forecast package from January 15 through May 31, with updates during periods of extreme conditions. The graphics will be available in 6 hour increments out to 36

integrated into the NWS Aberdeen suite of products; however NWS Glasgow has provided the following link for Northeast Montana to learn more about this program:

<http://www.wrh.noaa.gov/ggw/canl/canl.html>

How can I provide Feedback? Feedback is critical to the evaluation of the data that we provide. Contact the office at 605-225-0519 and ask for Mike Connelly or David Hintz.

Cold Advisory for Newborn Livestock Tue-Feb-03-2009: 6pm-Midnight Plot Generated Tue Feb 3 10:00:37 2009



New

New Employees

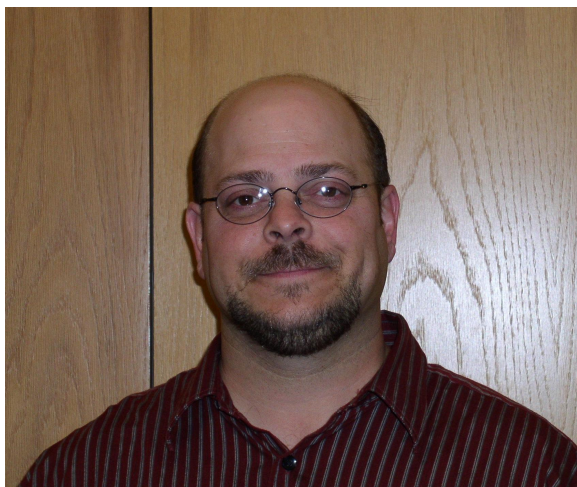


Steve Gisi
Electronics Technician

The newest ET at the WFO Aberdeen is Steven Gisi. He grew up and went to school graduating from Ipswich. He and his wife Rene have one son named Mark. After graduation, Steve entered the United States Air Force. His primary duty was flight control and instrument maintenance on the F111F aircraft. He was enlisted for 8 years spending 3 of those years at Royal Air Force Lakenheath England. After leaving the USAF, he took a position with Scientific Games as a senior customer service rep. He spent the next 10 years servicing and maintaining Powerball lottery machines. Steve moved on to try his hand at managing a sporting goods store for the next 4 years. While he enjoyed the job, he found that it took him away from what he really likes to do, hunting and fishing. So after finding out that there was an opening at the WFO in Aberdeen, he decided that not only will he be back dealing with electronics, he would have a little more time for the family and the outdoors. When not at the WFO office, you can probably find him on a lake fishing for walleyes, or bow hunting for white-tail deer. Even the winters don't slow him down as he has a ice house that can be seen on the local lakes.

Welcome

New Employees



Joe Caravella
Information Technology
Officer

Joe Caravella comes to the National Weather Service in Aberdeen from the Department of Veterans Affairs, CMOP (Consolidated Mail Outpatient Pharmacy) in Leavenworth, Kansas. Joe is a Gulf War Army veteran, a husband and father, and brings 11 years of IT experience to the ITO position. He holds a bachelors degree from Louisiana State University, and has several IT certifications (A+, MCSA, MCSE: Server 2003, MCTS: SQL Server 2005, MCITP: Business Intelligence Development, MCITP: SQL Server 2005 DBA). As an IT consultant and sole proprietor of his own IT company, he taught and supported online courses in relational database design and programming. Additionally, he served with the IT team at Morris & Dickson in Shreveport, Louisiana – the third largest drug distributor in the US.

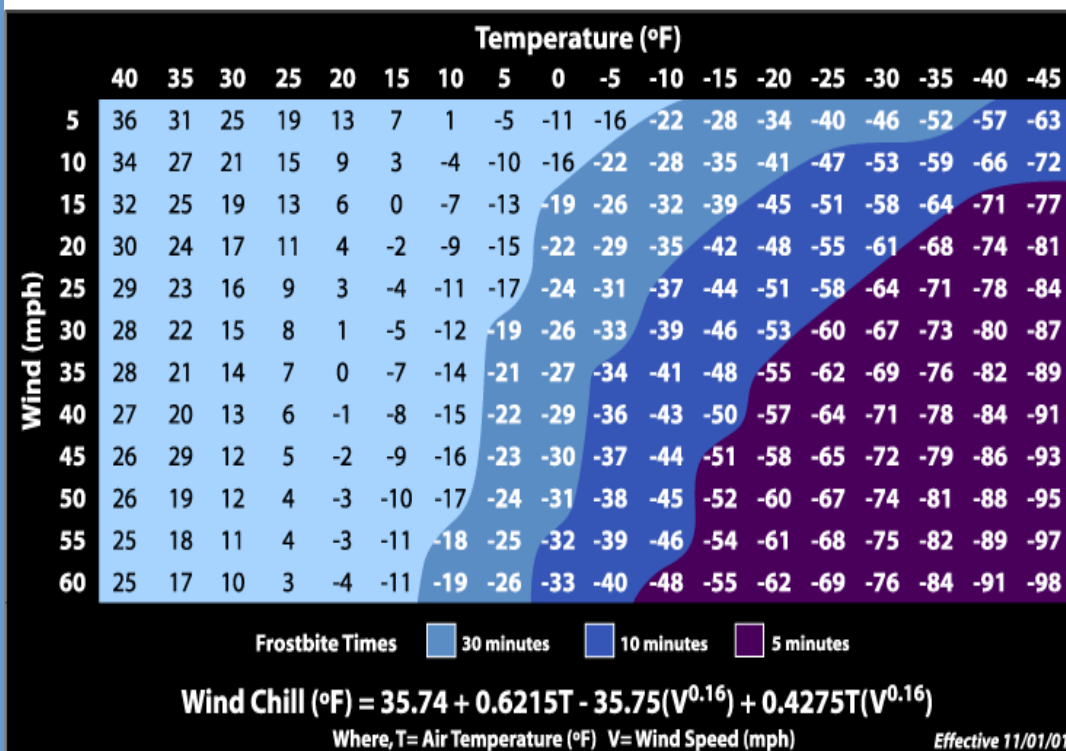


Renee Wise
Lead Forecaster

After almost six years at WFO Anchorage, Alaska, Renee is excited to be back in the Lower 48. After receiving her bachelor's degree from Villanova University and University of Reading, England, Renee earned her M.S. in Geosciences at Mississippi State University. While in Mississippi, Renee worked as a broadcast meteorologist and storm chaser. She is looking forward to the challenges of forecasting severe summer and winter weather in the northern Plains. Renee is enjoying the extra winter sunshine, while settling into the Aberdeen community with her husband, Stan, and children, William and Sydney.



Wind Chill Chart



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OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

Autumn, the year's last,
loveliest smile.

~ William Cullen Bryant

www.weather.gov/aberndeen